

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

Claim 1 (Currently Amended): A method for producing a recombinant glycoprotein in a unicellular or filamentous fungus ~~non-human eukaryotic~~ host cell that expresses a glycosidase activity, the method comprising the step of diminishing or depleting the activity of one or more enzymes in the host cell that transfers a sugar residue to the 1,6 arm of a lipid-linked oligosaccharide structure, and introducing into the host cell one or more nucleic acids encoding an  $\alpha$ -1,2 mannosidase activity and a GnTI activity; wherein said method results in the production within the host cell of recombinant glycoproteins having N-glycans attached thereto comprising GlcNAcMan<sub>X</sub>GlcNAc<sub>2</sub> core structures, wherein X is 3; or 4; ~~or 5~~.

Claim 2 (Previously presented): The method of claim 1, wherein the at least one glycosidase activity is expressed from a nucleic acid molecule introduced into the host cell.

Claim 3 (Previously presented): The method of claim 2, wherein the at least one glycosidase activity is a mannosidase activity.

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Currently Amended): The method of claim 1, further comprising the step of expressing within the unicellular or filamentous fungus ~~host cell~~ one or more glycosidase ~~enzyme~~ activities, ~~selected from glycosidase and glycosyltransferase activities~~, to produce a GlcNAc<sub>2</sub>Man<sub>3</sub>GlcNAc<sub>2</sub> structure.

Claim 7 (Previously presented): The method of claim 6, wherein the one or more enzyme activities is selected from  $\alpha$ -1,2 mannosidase,  $\alpha$ -1,3 mannosidase and GnTII activities.

Claim 8 (Previously presented): The method of claim 1, wherein at least one diminished or depleted enzyme is selected from the group consisting of an enzyme having dolichyl-P-Man:Man<sub>5</sub>GlcNAc<sub>2</sub>-

PP-dolichyl alpha-1,3 mannosyltransferase activity; an enzyme having dolichyl-P-Man:Man<sub>6</sub>GlcNAc<sub>2</sub>-PP-dolichyl alpha-1,2 mannosyltransferase activity and an enzyme having dolichyl-P-Man:Man<sub>7</sub>GlcNAc<sub>2</sub>-PP-dolichyl alpha-1,6 mannosyltransferase activity.

Claim 9 (Previously presented): The method of claim 1, wherein the diminished or depleted enzyme has dolichyl-P-Man:Man<sub>5</sub>GlcNAc<sub>2</sub>-PP-dolichyl alpha-1,3 mannosyltransferase activity.

Claim 10 (Previously presented): The method of claim 1, wherein the enzyme is diminished or depleted by mutation of a host cell gene encoding the enzymatic activity.

Claim 11 (Previously presented): The method of claim 10, wherein the mutation is a partial or total deletion of a host cell gene encoding the enzymatic activity.

Claim 12 (Previously presented): The method of claim 1, wherein the attached N glycans have seven or fewer mannose residues.

Claim 13 (Canceled)

Claim 14 (Previously presented): The method of claim 1, wherein the glycoprotein comprises one or more sugars selected from the group consisting of galactose, GlcNAc, sialic acid, and fucose.

Claim 15 (Previously presented): The method of claim 1, wherein the glycoprotein comprises at least one oligosaccharide branch comprising the structure NeuNAc-Gal-GlcNAc-Man.

Claim 16 (Canceled):

Claim 17 (Currently Amended): The method of claim 1, wherein the unicellular or filamentous fungus host cell is selected from the group consisting of *Pichia pastoris*, *Pichia finlandica*, *Pichia trehalophila*, *Pichia koclamae*, *Pichia membranaefaciens*, *Pichia opuntiae*, *Pichia thermotolerans*, *Pichia salictaria*, *Pichia guercuum*, *Pichia pijperi*, *Pichia stiptis*, *Pichia methanolica*, *Pichia sp.*, *Saccharomyces cerevisiae*, *Saccharomyces sp.*, *Hansenula polymorpha*, *Kluyveromyces sp.*, *Candida*

*albicans*, *Aspergillus nidulans*, *Aspergillus niger*, *Aspergillus oryzae*, *Trichoderma reesei*, *Chrysosporium lucknowense*, *Fusarium sp.*, *Fusarium gramineum*, *Fusarium venenatum* and *Neurospora crassa*.

Claims 18-58. (Canceled)

Claim 59 (Previously presented):        A method for producing a human-like glycoprotein in a non-human eukaryotic host cell comprising the step of diminishing or depleting from the host cell an *alg* gene activity and introducing into the host cell at least one glycosidase activity.

Claim 60-65 (Canceled)